Abstract of the Disclosure

A method of guaranteeing users' anonymity and a wireless LAN system therefor are provided. In a wireless LAN system, the method of guaranteeing user' anonymity includes (a) creating a plurality of temporary address sets, each of which corresponds to a unique Media Access Control (MAC) address of a wireless terminal and transmitting the temporary address set to the corresponding wireless terminal, and (b) performing data packet transmission between the wireless terminal and the wireless access node using a temporary address selected from the temporary address set as a source address or a destination address. Therefore, it is possible to guarantee users' anonymity and improve security of a system by not exposing a MAC address during data packet transmission between a wireless terminal and a wireless access node.